



ADVOCATES  
FOR HIGHWAY  
& AUTO SAFETY

January 27, 2023

The Honorable Christine Cohen, Senate Chair  
The Honorable Roland Lemar, Co-Chair  
The Honorable Rick Lopes, Vice Chair  
The Honorable Aimee Berger-Girvalo, Vice Chair  
Joint Committee on Transportation  
Legislative Office Building, Room 2300  
Hartford, Connecticut 06106

Dear Chair Cohen, Co-Chair Lemar, Vice Chair Lopes and Vice Chair Berger-Girvalo:

Advocates for Highway and Auto Safety (Advocates), an alliance of consumer, safety, medical, public health and law enforcement groups, and insurance companies working together to pass highway and auto safety laws that prevent crashes, save lives, reduce injuries, and contain costs, supports provisions in House Bill (HB) 5917 to prohibit open containers of alcohol in the passenger compartment of vehicles, to require the use of helmets by all motorcycle riders and to improve use of automated enforcement systems. Advancing these research-proven countermeasures will make Connecticut streets and highways safer for all roads users.

Traffic crashes are a deadly and costly threat to Connecticut families. In the first nine months of 2022, 284 people were needlessly killed on state roads according to new data released by the National Highway Traffic Safety Administration (NHTSA).<sup>i</sup> This is a nearly 17 percent increase in fatalities compared to the same period in 2021.<sup>ii</sup> Moreover, traffic fatalities cost the state more than \$6.1 billion each year.<sup>iii</sup> These serious and costly issues require urgent attention and effective solutions.

Motorcycles are the most hazardous form of motor vehicle transportation and, across the nation, fatalities are on the rise. In 2021, 6,101 motorcycle riders were killed in crashes, the highest number of annual motorcycle rider fatalities on record since comprehensive crash data collection began in 1975.<sup>iv</sup> New data finds that motorcycle rider fatalities rose again during the first nine months of 2022 by five percent.<sup>v</sup> In the event of a crash, motorcycle riders are nearly 28 times more likely to die than occupants in passenger vehicles.<sup>vi</sup>

“Minors only” helmet laws, currently in effect in the state, are ineffective, unenforceable and unpopular. According to the American Academy of Pediatrics, in states with weak youth-specific helmet laws, helmet use decreased and youth mortality increased. The Government Accountability Office (GAO) has concluded that “laws requiring all motorcyclists to wear helmets are the only strategy proven to be effective in reducing motorcyclist fatalities.” In the event of a crash, helmet wearing reduces a motorcycle rider’s risk of head injury by 69 percent and risk of death by 42 percent.<sup>vii</sup> Moreover, the observed use rate of U.S. DOT-compliant helmets among motorcyclists is over 86 percent in states with all-rider helmet laws, compared to only 53 percent in states without such laws.<sup>viii</sup> Simply put, all rider helmet laws save lives because they get motorcyclists to wear helmets.

Alcohol impaired driving is a persistent factor in crash fatalities and injuries on our roadways, accounting for 30 percent of deaths each year on average. Impaired driving has been identified as a leading contributor to rising traffic fatalities across the nation over the past couple of years. According to new data from NHTSA, the number of fatalities in police-reported alcohol involvement crashes rose in the first six months of 2022 compared to the same period in 2021.<sup>ix</sup> Laws that prohibit open containers of alcohol in the passenger compartment of vehicles have been proven to be effective in reducing alcohol-involved fatal crashes and fatalities.<sup>x</sup> Connecticut has yet to utilize this proven deterrence and should enact an open container law with haste.

Small changes in speed can have a big impact on safety. Crash tests conducted in 2019 showed that modest five to 10 miles-per-hour (mph) increases in speed can severely affect a driver’s risk of injury or even death.<sup>xi</sup> Speed increases have major implications for pedestrians as well, with the average risk of death for a pedestrian reaching 10 percent at an impact speed of 23 mph, 25 percent at 32 mph and 50 percent at 42 mph.<sup>xii</sup> Further, nearly half (48 percent) of speeding passenger vehicle drivers in fatal crashes were unbuckled, compared to 21 percent of non-speeding drivers.<sup>xiii</sup> Additionally, according to the Federal Highway Administration (FHWA), Americans are more likely to be injured in a red light running related event than any other crash.

Deterring speeding and red light running is critical, but it is implausible for law enforcement to be present at every incidence. When properly implemented, automated enforcement systems (speed and red light cameras) augment traditional enforcement without requiring traffic stops and curb deadly driving behaviors. Speed cameras alone resulted in a 19 percent reduction in the likelihood that a crash resulted in a fatal or incapacitating injury.<sup>xiv</sup> According to the Insurance Institute for Highway Safety (IIHS), rates of fatal red light running crashes were 21 percent lower and of all fatal crashes were 14 percent lower at signalized intersections in cities with camera programs. This “spillover” effect amplifies the safety benefits of camera programs. To encourage greater use of automated enforcement and affirm our organizations’ support for the proven technology, Advocates jointly released the *Automated Enforcement Checklist* with AAA, IIHS, Governors Highway Safety Association (GHSA) and National Safety Council (NSC) in May 2021.

On December 6, 2022, Advocates released its 2023 *Roadmap to Safety*; a copy accompanies this letter. Connecticut received a “yellow,” or caution, rating for lacking several critical measures to improve traffic safety including an all-rider motorcycle helmet requirement, use of automated enforcement safety systems and an open container law. With motor vehicle fatalities rising and crash-related costs soaring, we ask you to ensure these lifesaving provisions are advanced.

Sincerely,



Catherine Chase, President

cc: Joint Committee on Transportation Members

Encl.: *Roadmap to Safety*

<sup>i</sup> National Center for Statistics and Analysis. (2022, December). *Early estimate of motor vehicle traffic fatalities for the first 9 months (January–September) of 2022* (Crash•Stats Brief Statistical Summary. Report No. DOT HS 813 406). NHTSA.

<sup>ii</sup> National Center for Statistics and Analysis. (2022, December). *Early estimate of motor vehicle traffic fatalities for the first 9 months (January–September) of 2022* (Crash•Stats Brief Statistical Summary. Report No. DOT HS 813 406). NHTSA.

<sup>iii</sup> Blincoc, L., Miller, T., Wang, J.-S., Swedler, D., Coughlin, T., Lawrence, B., Guo, F., Klauer, S., & Dingus, T. (2022, December). *The economic and societal impact of motor vehicle crashes, 2019* (Report No. DOT HS 813 403). National Highway Traffic Safety Administration.

<sup>iv</sup> Traffic Safety Facts: Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2021, NHTSA, May 2022, DOT HS 813 298.

<sup>v</sup> National Center for Statistics and Analysis. (2022, December). *Early estimates of motor vehicle traffic fatalities and fatality rate by sub-categories through June 2022* (Crash•Stats Brief Statistical Summary. Report No. DOT HS 813 405). National Highway Traffic Safety Administration

<sup>vi</sup> Traffic Safety Facts. 2020 Data: Motorcycles, NHTSA, May 2022, DOT HS 813 306.

<sup>vii</sup> Liu BC, Ivers R, Norton R, Boufous S, Blows S, and Lo SK, “Helmets for Preventing Injury in Motorcycle Riders (Review),” The Cochrane Library, 2009.

<sup>viii</sup> Traffic Safety Facts, Research Note: Motorcycle Helmet Use in 2021 – Overall Results, NHTSA, March 2022, DOT HS 813 270

<sup>ix</sup> National Center for Statistics and Analysis. (2022, December). *Early estimates of motor vehicle traffic fatalities and fatality rate by sub-categories through June 2022* (Crash•Stats Brief Statistical Summary. Report No. DOT HS 813 405). National Highway Traffic Safety Administration.

<sup>x</sup> NHTSA, Alcohol and Drug Impaired Driving Countermeasures, Open Container. Available here:

<https://www.nhtsa.gov/book/countermeasures/deterrence/12-open-container>

<sup>xi</sup> Impact of Speeds on Drivers and Vehicles – Results from Crash Tests, AAA Foundation for Safety, Humanetics, and IIHS, Jan. 2021, available at

<https://www.iihs.org/api/datastore/document/bibliography/2218>

<sup>xii</sup> Impact Speed and a Pedestrian’s Risk of Severe Injury or Death, AAA Foundation for Traffic Safety, Sep. 2011., available at

<https://aaafoundation.org/wpcontent/uploads/2018/02/2011PedestrianRiskVsSpeedReport.pdf>

<sup>xiii</sup> Traffic Safety Facts 2018 Data: Speeding, NHTSA, Apr. 2020, DOT HS 812 932, available at <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812932>

<sup>xiv</sup> Effects of Automated Speed Enforcement in Montgomery County Maryland on Vehicle Speeds, Public Opinion and Crashes, Insurance Institute for Highway Safety, August; available at <https://www.iihs.org/topics/bibliography/ref/2097>



115 PEOPLE ARE KILLED ON U.S. ROADWAYS EVERY DAY.

WE HAVE THE TOOLS TO PREVENT IT.

BUT THEY MUST BE IMPLEMENTED – NOW.



ADVOCATES  
FOR HIGHWAY  
& AUTO SAFETY

TWENTIETH ANNIVERSARY EDITION  
2023 ROADMAP TO SAFETY



ADVOCATES  
FOR HIGHWAY  
& AUTO SAFETY

“State Farm and the other insurance members of Advocates would like to congratulate this lifesaving organization on the 20th anniversary of the *Roadmap*. It helps to guide all of us in the safety community on where we need to go next to enact laws that will prevent death and injury on our highways.”

ALAN MANESS, STATE FARM  
INSURANCE COMPANIES, INSURANCE  
CO-CHAIR

“Congratulations to Advocates on 20 years of publishing the *Roadmap*. This invaluable report has brought practical knowledge and real accountability to state policymakers, and in turn has saved countless lives through commonsense safety laws. Safety risks to all road users evolve over time and geography, but Advocates has smartly used the *Roadmap* to chart out steady but ambitious progress wherever it is needed. Farmers is proud to be a longtime partner of Advocates and we thank them for their contributions to public safety.”

MATT GANNON, FARMERS INSURANCE,  
INSURANCE VICE CHAIR

“Advocates for Highway and Auto Safety has a proven track record for helping to enact lifesaving traffic safety laws and advocating for proven vehicle safety technology. Advocates’ annual *Roadmap* has become THE guide utilized not only by states, but also by groups such as the Emergency Nurses Association (ENA). ENA has a long history of passionate advocacy and injury prevention efforts to prevent the devastating effects of motor vehicle crashes. By partnering with Advocates on state safety legislative efforts, ENA has been able to amplify the impact we can make in saving lives and reducing injuries.”

MARY JAGIM, PAST PRESIDENT,  
EMERGENCY NURSES ASSOCIATION,  
CONSUMER CO-CHAIR

“For 20 years, Advocates for Highway and Auto Safety has been shining a light on state efforts to stem the tragic toll autos take on America’s public health. Thanks to this unique effort, not only have state residents been made aware of their government’s safety successes and failures, but the enormous publicity surrounding this creative effort has motivated significant state by state improvements, saving thousands of lives. Thank you, Advocates for this extraordinary contribution to the well-being of all Americans.”

JACK GILLIS, FORMER EXECUTIVE  
DIRECTOR AND CEO, CONSUMER  
FEDERATION OF AMERICA; AUTHOR,  
THE CAR BOOK; BOARD CHAIR,  
CENTER FOR AUTO SAFETY; AND,  
CONSUMER VICE CHAIR

# EVERY DAY, 115 PEOPLE ARE NEEDLESSLY KILLED ON OUR ROADWAYS

## THIS CAN AND MUST STOP – NOW



Advocates for Highway and Auto Safety (Advocates) is proud to release this year's *Roadmap to Safety* – the 20th edition of our annual report assessing the state of safety on our nation's roads. Over the past few years, the *Roadmap of State Highway Safety Laws* has been expanded to encompass federal legislative and regulatory issues. As we enter our third decade of

producing this report, it provided a prime opportunity to rebrand (including for the first time, the online version of the report will allow readers to click through to dig deeper into data and facts) and incorporate our comprehensive approach and action plan into this instrumental tool. And, it couldn't be more timely. Motor vehicle crash deaths have skyrocketed, and it is imperative that we utilize every opportunity to end this tragic toll.

In 2021, traffic fatalities reached nearly 43,000, and preliminary 2022 data reveal the figures remain egregiously high. This means that every day, 115 people are needlessly killed on our roadways, as expressed on the cover. We dedicate this report to all those killed and injured in crashes and other vehicle incidents over the 20 years of this report, and we thank the loved ones of the those photographed and all other survivor advocates for their bravery and dedication to fight for improvements, so others are spared anguish which they were forced to suffer.

While the [enactment of the Infrastructure Investment and Jobs Act \(IIJA\) in 2021](#) was a victory and truly the culmination of a great deal of hard work by Advocates and many others, we don't have much to show for it a year later. Deadlines for regulatory action are fast approaching, and the U.S. Department of Transportation (DOT) must not delay implementation of lifesaving advances like automatic emergency braking (AEB) for cars and large trucks, impaired

driving prevention technology, and "hot cars" detection and alert systems to stop children from dying or suffering lifelong injuries from heatstroke. The issuance of optimal safety standards for proven technologies – using the IIJA directives as a "floor" rather than a "ceiling" for what must be achieved – will promote safety and equity for all road users.

While mandating game-changing technology, making roadway infrastructure upgrades to improve safety, and closing gaps in state safety laws, among other solutions, could prevent and mitigate crashes now, some are still charging ahead with a push for unproven and unregulated systems for partial or fully automated driving. The rush to unleash this technology on public roads has produced alarming results. Data from the National Highway Traffic Safety Administration (NHTSA), investigations by the National Transportation Safety Board (NTSB), and real-world accounts from cities like San Francisco clearly demonstrate that these systems are not ready for prime time. We must instead accelerate proven solutions.

Over the past 20 years, more than three-quarters of a million people were killed and 51.5 million more were injured in motor vehicle crashes. Yet, no state has attained a perfect score in our annual ratings. Further, the U.S., once a leader, has fallen behind our international counterparts in adopting measures to enhance safety. We must change that, and the *Roadmap to Safety* offers the tools. Advocates challenges our nation's federal and state leaders to take this report and implement it – now.

A handwritten signature in black ink, appearing to read "Catherine Chase".

Catherine Chase  
President  
Advocates for Highway and Auto Safety

# TABLE OF CONTENTS

<b>Table of Contents</b> .....	2
<b>Glossary of Acronyms</b> .....	3
<b>The Issue</b> .....	4
<b>The Impact</b> .....	4
<b>The Solutions</b> .....	5
<b>Criteria for the 16 Optimal Laws</b> .....	6
<b>Strategies for Success</b> .....	8
<b>2022 Advocacy Activity</b> .....	9
<b>Special Feature – Autonomous Vehicles</b> .....	10
<b>Occupant Protection</b> .....	12
Primary Enforcement Seat Belt Laws .....	12
All-Rider Motorcycle Helmet Laws .....	14
Laws Rating Chart and Map .....	16
<b>Child Passenger Safety</b> .....	18
Laws Rating Chart and Map .....	20
<b>Teen Driving – Graduated Driver Licensing (GDL) Programs</b> .....	22
Laws Rating Chart and Map .....	24
<b>Impaired Driving</b> .....	26
Laws Rating Chart and Map .....	29
<b>Distracted Driving</b> .....	30
Laws Rating Chart and Map .....	32
<b>Automated Enforcement to Curb Speed</b> .....	34
Laws Rating Chart and Map .....	38
<b>Overall State Laws Rating Chart and Map</b> .....	40
<b>States at a Glance</b> .....	42
<b>Source Information</b> .....	60
<b>Acknowledgments</b> .....	64
<b>About Advocates</b> .....	64
<b>Cover Photo Details</b> .....	Inside Back Cover

# GLOSSARY OF ACRONYMS

**ADAS** - Advanced Driver Assistance Systems  
**ADS** - Automated Driving System  
**ADVOCATES** - Advocates for Highway and Auto Safety  
**AAA** - American Automobile Association  
**AAP** - American Academy of Pediatrics  
**AEB** - Automatic Emergency Braking  
**AE** - Automated Enforcement  
**AV** - Autonomous Vehicle  
**BAC** - Blood Alcohol Concentration  
**BSD** - Blind Spot Detection  
**CDC** - Centers for Disease Control and Prevention  
**CHOP** - Children's Hospital of Philadelphia  
**CIRP** - Center for Injury Research and Prevention  
**CMV** - Commercial Motor Vehicle  
**CPS** - Child Passenger Safety  
**CRS** - Congressional Research Service  
**DC** - District of Columbia  
**DMS** - Driver Monitoring System  
**DUI** - Driving Under the Influence  
**DWI** - Driving While Intoxicated  
**ENA** - Emergency Nurses Association  
**FCW** - Forward Collision Warning  
**FMCSA** - Federal Motor Carrier Safety Administration  
**FMVSS** - Federal Motor Vehicle Safety Standard  
**GAO** - Government Accountability Office  
**GHSA** - Governors Highway Safety Association  
**GDL** - Graduated Driver Licensing  
**IID** - Ignition Interlock Device  
**IIJA** - Infrastructure Investment and Jobs Act (P. Law 117-58)  
**IIHS** - Insurance Institute for Highway Safety  
**ISA** - Intelligent Speed Assistance  
**LKA** - Lane Keep Assist  
**LDW** - Lane Departure Warning  
**MADD** - Mothers Against Drunk Driving  
**MPH** - Miles Per Hour  
**NHTSA** - National Highway Traffic Safety Administration  
**NTSB** - National Transportation Safety Board  
**NETS** - Network of Employers for Traffic Safety  
**NCAP** - U.S. New Car Assessment Program  
**SSA** - Safe System Approach  
**U.S. DOT** - United States Department of Transportation  
**V2X** - Vehicle-to-Everything  
**VRU** - Vulnerable Road User

## THE ISSUE

All road users should be able to depend on the safety, reliability and accessibility of our nation's roads and highways. Tragically, more than 115 people are killed and nearly 6,250 more are injured in crashes every day, imposing an enormous physical, emotional and economic cost.

By any measure, this is a major public health problem. According to a [public opinion survey](#) from ENGINE INSIGHTS CARAVAN commissioned by Advocates, two-thirds of respondents said that not enough is being done to reduce dangerous driving behaviors. In 2019, the U.S. had the highest motor vehicle crash death rate (11.1 per 100,000 population) among 29 high-income countries. In a study of 34 similarly developed countries, the U.S. was one of only three that experienced an increase in road deaths in 2020, compared to the previous three years.

U.S. lawmakers and officials at all levels can and must do more to ensure safe roads for everyone.

## THE IMPACT

According to NHTSA, 42,915 people were killed in motor vehicle crashes in 2021. This is an increase of 10.5% over 2020 and a continuation of the recent upward trajectory of skyrocketing fatalities. This data suggest that while fewer crashes may be occurring, they are deadlier. NHTSA has expressed concern that the fatality increases are due, in part, to speeding, impairment, and not buckling up. The latest data show that in 2020, 2.28 million people were injured in crashes – a decrease of 17% – with police-reported crashes also dropping by 22%. Fatalities in large truck crashes also jumped by 13% in 2021, resulting in more than 5,600 people killed.

In addition to the physical and emotional toll of crashes, they also impose a significant financial burden on society. The annual economic cost of motor vehicle crashes is \$314 billion. When loss of life, pain and decreased quality of life are added to economic costs, it is estimated to exceed one trillion dollars. Moreover, according to the Network of Employers for Traffic Safety (NETS), motor vehicle crashes cost employers \$72.2 billion in direct crash-related expenses in 2019.

**42,915 PEOPLE WERE KILLED IN  
MOTOR VEHICLE CRASHES IN 2021  
– AN INCREASE OF 10.5% OVER 2020**

### ANNUAL ECONOMIC COST OF MOTOR VEHICLE CRASHES

**\$100.43 BILLION**  
Lost Workplace and  
Household Productivity

**\$98.74 BILLION**  
Property Damage Costs

**\$84.74 BILLION**  
Other Costs

**\$30.36 BILLION**  
Present and Future  
Medical Costs

**→ TOTAL = \$314 BILLION ←**

**Each person living in the U.S. essentially pays an annual “crash tax” of nearly \$950**



# THE SOLUTIONS

Advocates pursues a comprehensive strategy to improve safety, which includes:



## SAFE VEHICLES

It is a transformational time in surface transportation innovation with the availability of safety technologies to prevent or mitigate crashes caused by numerous factors. The Insurance Institute for Highway Safety (IIHS) has demonstrated the effectiveness of vehicle safety technologies including AEB, lane departure warning (LDW), and blind spot detection (BSD), and the NTSB has included increasing implementation of collision avoidance technologies in the Most Wanted List of Transportation Safety Improvements since 2016. NHTSA has estimated that over 600,000 lives were saved by motor vehicle technologies between 1960 and 2012.

Advocates supports requiring the next generation of verified safety technologies including AEB, impaired driving prevention technology, and others as standard equipment on new vehicles to add to this remarkable, lifesaving legacy. Tremendous opportunity also exists to improve the safety of commercial motor vehicles (CMVs). Safety systems such as AEB, speed limiting devices and comprehensive underride guards should be standard on new large trucks. Additionally, the safety of school buses can be bolstered through technology and seat belts.



## SAFE ROAD USERS

Advocates works to improve traffic safety laws in all 50 states and the District of Columbia (DC) that are critical to keeping all road users both inside and outside of vehicles – drivers, passengers, motorcyclists, bicyclists, pedestrians, micromobility users, wheelchair users, and others – safe. Walking, biking and rolling should be safe and reliable modes of transportation. Based on government and private research, crash data and state experience, we urge all states to enact the optimal laws rated in this report covering occupant protection, child passenger safety, young novice drivers, impaired driving, distracted driving, and automated enforcement to curb speed.

Advocates also supports measures to spur state action on traffic safety laws to enhance safety for all road users including effective federal incentive grant programs with accountability and oversight. When used appropriately, the withholding of state highway funds for inaction also has proven successful in advancing lifesaving upgrades including minimum 21 drinking age, zero tolerance for alcohol for youth, .08% BAC, and commercial driver licensing.

## SAFEST ROUTE

## SAFE ROAD INFRASTRUCTURE

Improving the design and operation of roadways to accommodate all road users safely will help to prevent conflicts between road users (drivers of vehicles, motorcycle riders, pedestrians, bicyclists, micromobility riders, wheelchair users and others) and minimize impact forces to prevent fatalities and serious injuries.

A Safe System Approach (SSA) acknowledges that people make mistakes and their ability to tolerate injury is limited. It focuses on six principles: deaths and serious injuries are unacceptable; humans make mistakes; humans are vulnerable; responsibility is shared; safety is proactive; and, redundancy is crucial. The SSA also identifies five elements including safe road users, safe vehicles, safe speed, safe roads and post-crash care. Action to advance these priorities will prevent crashes and mitigate harm when they do occur. Since Advocates' founding more than three decades ago, our mission and actions to improve safety have aligned with a SSA. The Johns Hopkins Center for Injury Research and Policy convened a working group, of which Advocates was a member, to develop the [“Recommendations of the Safe System Consortium.”](#)

# CRITERIA FOR THE 16 OPTIMAL LAWS

**B**ased on government and private research, crash data and state experience, Advocates has determined the traffic safety laws listed below are critical to reducing motor vehicle deaths and injuries. For the purposes of this report, states are only given credit if the state law meets the optimal safety provisions as defined below. **No credit is given for laws that fail to fully meet the criteria in this report, nor is credit given for laws subject to secondary enforcement. Similarly, GDL laws that allow driver education programs to replace compliance with provisions do not receive credit.**



## OCCUPANT PROTECTION

**Primary Enforcement Front Seat Belt Law** - Allows law enforcement officers to stop and issue a ticket for a violation of the seat belt law for front seat occupants. No other violation need occur first.



**Primary Enforcement Rear Seat Belt Law** - Requires that all occupants in the rear seats of a vehicle wear seat belts and allows law enforcement officers to stop and issue a ticket for a violation of the seat belt law. No other violation need occur first.

**All-Rider Motorcycle Helmet Law** - Requires all motorcycle riders, regardless of age, to use a helmet that meets U.S. DOT standards.



## CHILD PASSENGER SAFETY (CPS)

**Rear Facing Through Age 2 or Older Law** - Requires infants and toddlers to remain in a rear facing child restraint system in the rear seat from birth through age two or longer. After the child reaches the maximum weight and height limit for the rear facing safety seat, the child may be placed forward facing in a harness-equipped child restraint system. The child restraint system should be certified by the manufacturer to meet U.S. DOT safety standards.

**Booster Seat Law** - Requires that children who have outgrown the height and weight limit of a forward facing safety seat be placed in a booster seat that should be used until the child can properly use the vehicle's seat belt in a rear seat. This usually occurs when the child reaches 57 inches in height and is older than age eight. The booster seat should be certified by the manufacturer to meet U.S. DOT safety standards.

**Rear Seat Through Age 12 Law** - Requires children age 12 and younger to be properly restrained in a rear seat.



## TEEN DRIVING

GDL programs allow teen drivers to learn to drive under lower risk conditions, and consist of a learner's stage, then an intermediate stage, before being granted an unrestricted license. The learner's stage requires teen drivers to complete a minimum number of hours of adult-supervised driving in order to move to the next phase and drive unsupervised. The intermediate stage restricts teens from driving in high-risk situations for a specified period of time before receiving an unrestricted license. Advocates rates state GDL laws on four key safety components aligned with the IIHS recommendations and identified in research and data analysis:

**Minimum Ages for Learner's Permit and Licensing** - A beginning teen driver must be at least 16 years old to obtain a learner's permit and 17 years old to obtain a license.

**70 Hours of Supervised Driving Provision** - A beginning teen driver must receive at least 70 hours of behind-the-wheel training with an adult licensed driver.

**Nighttime Driving Restriction Provision** - Prohibits unsupervised driving starting at 8 p.m.

**Passenger Restriction Provision** - Prohibits non-familial teen passengers from riding with a teen driver without adult supervision.

# CRITERIA FOR THE 16 OPTIMAL LAWS



## IMPAIRED DRIVING

**All-Offender Ignition Interlocks** - Mandates the installation of ignition interlock devices (IIDs) on the vehicles of all convicted drunk driving offenders.

**Open Container Law** - Prohibits open containers of alcohol in the passenger area of a motor vehicle. To comply with federal requirements, the law must: prohibit both possession of any open alcoholic beverage container and the consumption of alcohol from an open container; apply to the entire passenger area of any motor vehicle; apply to all vehicle occupants except for passengers of buses, taxi cabs, limousines or persons in the living quarters of motor homes; apply to vehicles on the shoulder of public highways; and, require primary enforcement of the law. State laws are counted in this report only if they are in compliance with the federal law and regulation, based on annual determinations made by U.S. DOT.



## DISTRACTED DRIVING

**All-Driver Text Messaging Restriction** - Prohibits all drivers from sending, receiving, or reading a text message from any handheld or electronic data communication device, except in an emergency.

**GDL Cell Phone Restriction** - Prohibits all use of cellular devices (hand-held, hands-free and text messaging) by beginning teen drivers, except in an emergency, for the entire duration of the GDL program.



## AUTOMATED ENFORCEMENT TO CURB SPEED

**Permits Automated Enforcement by Law** – A state receives credit if it has enacted a law permitting the use of automated speed enforcement.

**Automated Enforcement in Use** – A state receives credit if automated speed enforcement is in use within the jurisdiction.

# STRATEGIES FOR SUCCESS

**A**dvocates is an alliance of consumer, medical, public health, law enforcement, and safety groups and insurance companies and agents with a mission of preventing motor vehicle crashes, saving lives, reducing injuries and containing costs.

- **Federal Legislative:** Advocates leads efforts on Capitol Hill to advance priority safety measures by engaging Members of Congress, staff and Congressional committees and proposing, drafting, analyzing and building support for safety legislation. We testify before Congress, submit written statements, generate group letters and action alerts, and lead coalitions, among other activities.
- **Federal Regulatory:** Advocates provides technical comments and safety information during the regulatory process to agencies including the U.S. DOT, NHTSA, Federal Motor Carrier Safety Administration (FMCSA) and others. We seek to influence agency actions and serve as an expert for government agencies.
- **State Legislative:** Advocates conducts extensive organizing and advocacy efforts in states across the nation and DC by meeting with legislators' and governors' staffs, testifying on safety bills, writing and submitting testimony and letters, developing strategies with coalition partners, and advancing other initiatives. We also staunchly oppose the rollback of existing traffic safety laws.

All of our program areas are supported by our efforts in the media, leadership roles, and participation in events and conferences. Advocates has earned a reputation as a go-to expert on safety, and we harness opportunities to advance and support our legislative goals. Advocates' expertise is sought by government agencies, professional associations, and other groups, and we frequently provide our analysis and recommendations in furtherance of our goals.

## FEDERAL LEGISLATIVE

Advocates was sharply focused on oversight of implementation of the IIJA signed into law in November 2021. Congressional committees held hearings on the new law for which Advocates submitted letters urging swift action on the safety directives by the U.S. DOT as a “floor,” and not a “ceiling,” for what must be achieved. Advocates has also been proposing, drafting, and garnering support for many of the legislative items that were left on the “cutting room floor” during final negotiations on the infrastructure bill. We continue to support funding for and directives to improve roadway infrastructure safety for the benefit of all road users as well as adequate funding and resources for the U.S. DOT to ensure the agency is able to meet its safety mission effectively. Moreover, Advocates led efforts in opposition to numerous anti-safety proposals that sought to degrade, roll back, or repeal existing legislative and regulatory protections, many of which targeted large truck safety rules.

## FEDERAL REGULATORY

Advocates filed regulatory comments on issues including the U.S. New Car Assessment Program (NCAP), event data recorders, speed limiting requirements for CMVs, and applications for exemptions from federal motor vehicle safety standards (FMVSS) for autonomous vehicles (AVs), among others. We also challenged inadequate agency actions through petition for reconsideration on a final rule related to truck underride guards.

## STATE LEGISLATIVE

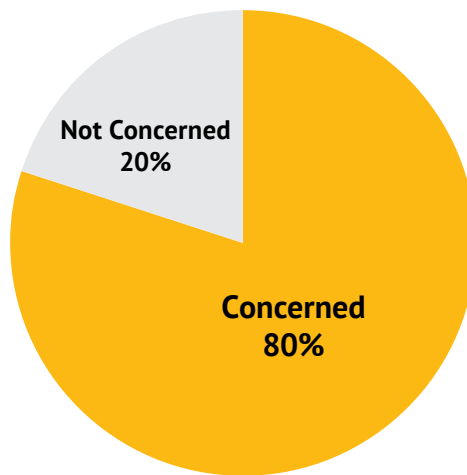
Advocates influenced action on effective countermeasures to improve occupant protection, upgrade motorcycle rider safety, curb speeding, protect child passengers, advance the safety of teen and young adult novice drivers, prevent impaired driving and restrict use of cell phones to avert distracted driving, as well as oppose weakening or repeals of such laws. As appropriate, we also support efforts that require safety upgrades as a component of infrastructure planning, maintenance and building. Our efforts are in collaboration with local and national coalitions, organizations and victim and survivor advocates. Many bills take multi-session advocacy before advancing. In those instances, Advocates builds momentum for subsequent sessions.



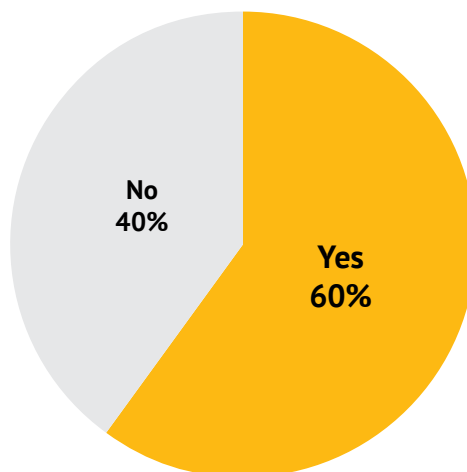
# AUTONOMOUS VEHICLES

It is far too early to assess whether automated driving technology has the potential to reduce our nation's mounting roadway death and injury toll. However, the lack of federal performance standards, strong government oversight, adequate consumer information, comprehensive data collection, and effective industry accountability could very well sink this possibility. In the absence of safeguards, all road users are unknowing and unwitting participants in the testing of experimental autonomous driving technology on public roadways and are imperiled. Several fatal crashes involving cars equipped with automated driving systems (ADS) or varying levels of driving automation have been investigated by the NTSB and NHTSA. These investigations have and will continue to identify safety deficiencies, determine contributing causes, and recommend government and industry actions to prevent future deadly incidents. Additionally, data obtained through a Standing General Order issued by NHTSA has revealed 202 crashes involving ADS and 605 with advanced driver assistance systems (ADAS) – including 18 resulting in a fatality – based on reporting from July 2021 to October 2022. This new data underscore the safety issues regarding unregulated ADS on public roads. Moreover, the public consistently has expressed safety concerns about sharing the road with driverless vehicles. Notably, respondents have indicated that their apprehension would be ameliorated by the issuance of minimum government safety requirements. According to a 2021 survey commissioned by Advocates and conducted by ENGINE INSIGHTS:

## HOW CONCERNED ARE YOU ABOUT SHARING PUBLIC HIGHWAYS AND ROADS WITH DRIVERLESS CARS AS A MOTORIST, BICYCLIST, OR A PEDESTRIAN?



## CURRENTLY, THERE ARE NO GOVERNMENT SAFETY REQUIREMENTS FOR THE PERFORMANCE OF DRIVERLESS TECHNOLOGIES ON CARS OR TRUCKS. IF YOU KNEW THAT COMPANIES HAD TO MEET MINIMUM GOVERNMENT SAFETY REQUIREMENTS FOR THEIR DRIVERLESS CARS AND TRUCKS, WOULD THAT ADDRESS YOUR CONCERNS?





# AUTONOMOUS VEHICLES

Industry continues to pressure for enactment of national legislation authorizing U.S. DOT to exempt potentially millions of AVs from federal safety standards. Companies have invested billions of dollars into AV development without realizing a significant return. Legislation that rolls back current safety standards and limits the oversight of state and local governments is unacceptable. Moreover, federal legislation is unnecessary as the U.S. DOT has the authority and expertise to set policy and regulate AVs. Any federal legislation that is advanced likely will set AV policy for decades to come. Unfortunately, all federal AV bills have been rife with objectionable issues including:

- Exempting tens of thousands of AVs from current federal safety standards prior to issuance of new safety standards for the ADS and related issues including cybersecurity.
- Allowing essential safety systems to be “turned off.”
- Failing to require adequate information be provided to regulators and the public.
- Preempting state laws and regulations in the absence of federal regulations.
- Lacking safeguards to ensure promised societal benefits such as improved safety, mobility, equity, and environmental outcomes, while also protecting workers.
- Omitting proper oversight for testing.
- Leaving people with disabilities and older adults without an assurance of access and safety.
- Relegating action to advisory committees.

Since November 2020, Advocates has been leading a coalition of 60+ stakeholders in support of the “[AV Tenets](#),” a safety- and people-first approach to the technology that should be the basis for any AV policy. Advocates will continue to use the AV Tenets in our advocacy efforts should legislation on this issue be considered by Congress.

## AV TENETS





# OCCUPANT PROTECTION

## PRIMARY ENFORCEMENT SEAT BELT LAWS

### Issue

Seat belt use, reinforced by effective safety belt laws, is a proven lifesaver. Seat belts serve as the first line of defense against injury or death for vehicle occupants when crashes occur.

### Impact

In 2021, an estimated 25,008 passenger vehicle occupants died in motor vehicle crashes, a five percent increase from 2020. Among passenger vehicle occupant fatalities that year, it is estimated that half were unrestrained.

### Solutions

Laws, Technology  
and Roadway Safety  
Infrastructure

#### Primary Enforcement Seat Belt Laws for All Occupants

#### Safety Technologies and Improved Safety Standards Can Protect Vehicle Occupants and Other Road Users

- Proven collision avoidance systems in vehicles including AEB, LDW, BSD, rear AEB, and rear-cross traffic alert should be required.
- Rear seat belt reminders.

#### Road Safety Infrastructure Improvements and the Safe System Approach





# OCCUPANT PROTECTION

## PRIMARY ENFORCEMENT SEAT BELT LAWS

### The Facts

- From 1975 to 2017, seat belts have saved over 374,000 lives and over \$1 trillion in economic costs.
- The NHTSA estimated that needless deaths and injuries resulting from non-use of seat belts cost society more than \$10 billion annually in medical care, lost productivity, and other injury related costs based on 2010 data. When adjusted solely for inflation, this would equate to more than \$13 billion.
- In 2020 among passenger vehicle occupant fatalities with known restraint use, 50% seated in the front row and 59% of those in the second row were unrestrained.
- In fatal crashes in 2020, 82% of passenger vehicle occupants who were totally ejected from the vehicle were killed. Only one percent of the occupants reported to have been using restraints were totally ejected, compared with 26% of the unrestrained occupants.
- For passengers who survived fatal crashes in 2020, only 16% were unrestrained, compared to 51% of those who died.
- NHTSA has identified lack of seat belt use as one of “three major behavioral factors” that “largely explain” the dramatic spike in crash fatalities between 2019 and 2020.
- The use of seat belts in passenger vehicles saved an estimated 14,955 lives of occupants aged five and older nationwide in 2017, the latest year for which data is available. An additional 2,549 lives would have been saved in 2017 if all unrestrained passenger vehicle occupants aged five and older involved in fatal crashes had worn their seat belts.
- Rear seat passengers are more than twice as likely to die in a crash if they are unbelted.
- Adults are not buckling up in the rear seat as much as they are in the front seat, with rear seat belt use ten to 15 percent lower than in the front seat, according to a study by the IIHS and the Children’s Hospital of Philadelphia (CHOP).
- Rear seat belt use by passengers in fatal crashes was lower than front seat belt use in almost every state and was substantially lower in many states.



- Unbelted rear seat passengers pose a serious threat to the driver and other vehicle occupants, as well as themselves. Unbelted rear seat passengers are referred to as “back seat bullets” because they can be thrust at high rates of speed into the driver resulting in loss of control of the vehicle and into other occupants causing fatalities and serious injuries. The chance of death for a belted driver seated directly in front of an unrestrained passenger in a serious head-on crash was 2.27 times higher than if seated in front of a restrained passenger.

[Click here to learn more](#)



# OCCUPANT PROTECTION

## ALL-RIDER MOTORCYCLE HELMET LAWS

### Issue

Motorcycles are the most hazardous form of motor vehicle transportation.

### Impact

In 2021, 6,101 motorcycle riders were killed, a nine percent increase from the previous year.

This is the highest fatality total in a single year since data collection began in 1975.

### Solutions

Laws, Technology  
and Roadway Safety  
Infrastructure

#### **All-Rider Helmet Requirements Are Effective, Reduce Costs and the Public Supports Them –**

According to a Government Accountability Office (GAO) report, “laws requiring all motorcyclists to wear helmets are the only strategy proved to be effective in reducing motorcyclist fatalities.”

#### **Safety Technology to Prevent Motorcycle Crashes**

- Proven collision avoidance systems in vehicles including AEB, LDW, BSD, rear AEB, and rear-cross traffic alert should be required to detect and safely respond, as appropriate, to vulnerable road users (VRUs) including motorcycle riders.
- Motorcycle anti-lock braking systems were associated with a 22% reduction in the rate of fatal crash involvements, according to IIHS research, and should be required as standard equipment.

#### **Road Safety Infrastructure Improvements and the Safe System Approach**



# OCCUPANT PROTECTION

## ALL-RIDER MOTORCYCLE HELMET LAWS

### The Facts

- In 2020, 40% of motorcyclists killed were not wearing a helmet, when helmet use was known.
- The observed use rate of U.S. DOT-compliant helmets among motorcycle riders was just over 86% in states with all-rider helmet laws, compared to only 53% in other states in 2021.
- Motorcycle helmets reduce the risk of head injury by 69% and reduce the risk of death by 42%.
- Annually, motorcycle crashes cost \$13 billion in economic impacts and \$66 billion in societal harm as measured by comprehensive costs based on 2010 data. When adjusted only for inflation, these amounts increase to \$17 billion and \$86 billion, respectively. Serious injuries and fatalities accounted for 87% of total comprehensive costs of motorcycle crashes, compared to 57% of the total comprehensive costs of all motor vehicle crashes.
- According to NHTSA, in 2020, there were 7.7 times as many unhelmeted fatalities (1,897 fatalities) in states without a universal helmet law compared to states with a universal helmet law (246 fatalities). These states were similar with respect to total resident populations.
- In states without all-rider helmet laws, 57% of motorcyclists killed in 2020 were not wearing helmets, compared to 11% in states with such laws.
- In Michigan, which repealed its all-rider law in 2012, there would have been 26 fewer motorcycle crash deaths (a 21% reduction) that year if the helmet mandate was still in place, according to the University of Michigan Transportation Research Institute. Additionally, in the remainder of the year after the helmet repeal was enacted, only 74% of motorcycle riders involved in crashes were helmeted, compared to 98% in the same time period of the previous four years.
- By an overwhelming majority (more than 82%), Americans favor state laws requiring all motorcycle riders to wear helmets.



- According to the American Academy of Pediatrics (AAP), in states with only youth-specific helmet laws, helmet use has decreased and youth mortality has increased. Serious traumatic brain injury among young riders was 38% higher in states with only age-specific laws compared to states with all-rider helmet laws.
- All-rider motorcycle helmet law repeal efforts which include requirements for motorcycle education and training fail to meet the safety benefit provided by a universal helmet law. There is no scientific evidence that motorcycle rider training reduces crash risk.

[Click here to learn more](#)







# CHILD PASSENGER SAFETY

## *Issue*

The best way to protect child passengers is to place them in the back seat, restrained by a properly installed child safety seat, booster seat or safety belt, as appropriate for their age, size and development.

## *Impact*

Motor vehicle crashes are among the leading causes of death for children ages one to 14 in the U.S.

## *Solutions*

Laws, Technology  
and Roadway Safety  
Infrastructure

### **Comprehensive State Laws to Incentivize Proper Child Safety Seat and Seat Belt Use**

### **Safety Technologies and Improved Safety Standards Can Protect Children and Other Road Users**

- Proven collision avoidance systems in vehicles including AEB, LDW, BSD, rear AEB, and rear-cross traffic alert should be required to detect and safely respond, as appropriate, to VRUs including children.
- Occupant detection and alert technology to prevent hot car incidents.
- Rear seat belt reminders.
- Technology as well as hood and bumper standards to prevent frontovers.
- An update to the safety standard to prevent seat back collapse.
- Side impact protection for children.

### **Road Safety Infrastructure Improvements and the Safe System Approach**



# CHILD PASSENGER SAFETY

## The Facts



- Across all age groups, injury risk is lowest (less than two percent) when children are placed in an age-appropriate restraint in the rear seat.
- When used properly, child safety seats reduce fatal injury by 71% for infants and 54% for toddlers in passenger cars.
- Appropriate child safety seats and restraints are very effective in preventing injury:
  - > 47% effective in preventing fatalities for ages 1-3 in all crashes;
  - > 43% effective in preventing fatalities for ages 3-5 in all crashes; and,
  - > 67% effective in preventing serious to critical injuries for ages 5-8 in all crashes.
- According to the AAP, infants and toddlers are at a particularly high risk of head and spine injuries in motor vehicle crashes because of their relatively large heads and structural features of the neck and spine. By supporting the entire head and spine, a rear facing car seat provides optimal support during a crash.
- Using a booster seat with a seat belt instead of a seat belt alone reduces a child's risk of injury in a crash by 45%, according to the Center for Injury Research and Prevention (CIRP), CHOP, and the Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania.
- Once a child has outgrown a child safety seat and can properly use the vehicle's seat belt, they should remain buckled in the rear seat through age 12. This is consistent with recommendations from groups including AAP, CDC, IIHS, and NHTSA.
- A December 2021 poll commissioned by Advocates and conducted by ENGINE INSIGHTS found that 65% are "extremely" or "very concerned" about lack of seat belt or child safety seat use on our roadways.

[Click here to learn more](#)



# CHILD PASSENGER SAFETY

## The Solutions - Laws Rating Chart and Map

**GOOD**

State has all three optimal laws  
– 0 states

**CAUTION**

State has two optimal laws  
– 11 states

**DANGER**

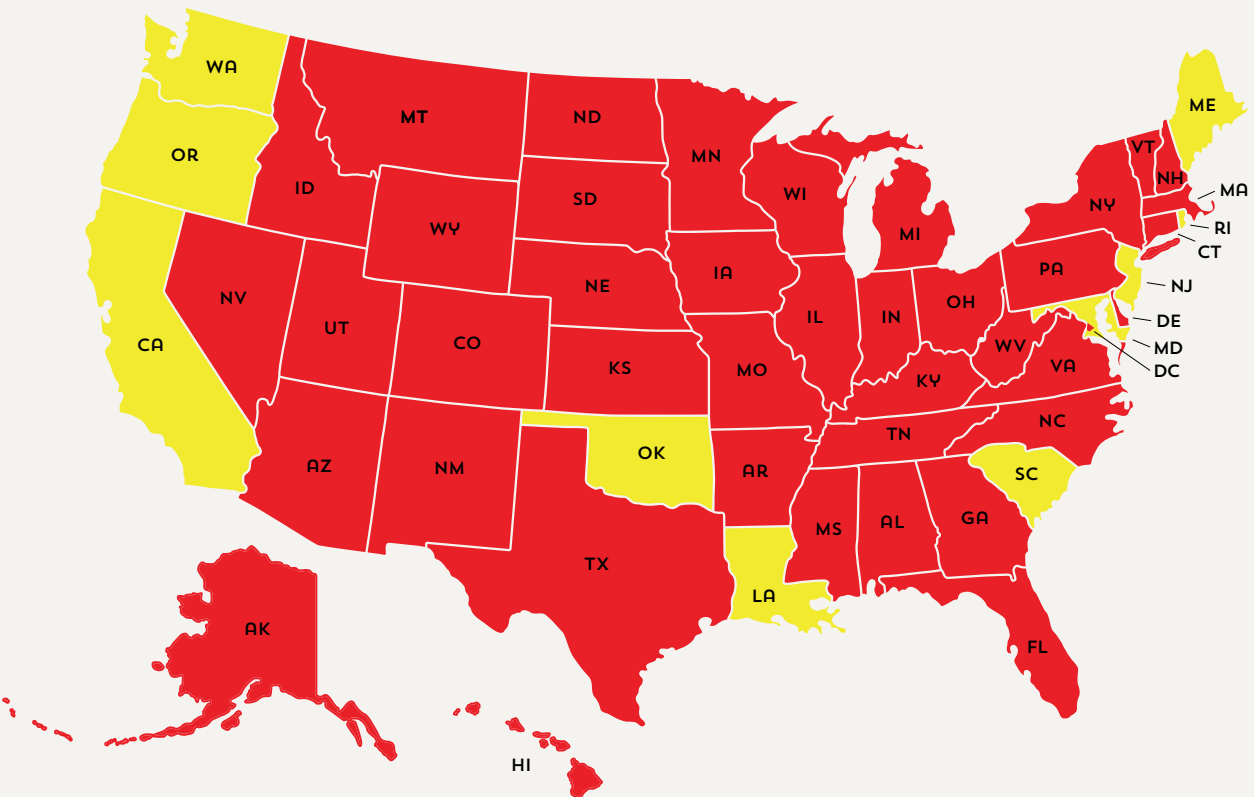
State has one or zero optimal laws  
– 39 states plus DC

● Optimal law adopted

		ALABAMA	ALASKA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	HAWAII	IDAHO	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE	NEW JERSEY	NEW MEXICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	UTAH	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING	TOTAL	
STATE RATING		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
OPTIMAL LAWS																																																					
	Rear Facing Through Age 2 or Older Law					●	●	●			●	●	●					●	●		●	●							●	●	●	●	●	●														●	●				18 + DC
	Booster Seat Law					●				●								●	●	●	●	●	●							●				●	●	●							●	●				●				17	
	Rear Seat Through Age 12 Law																		●																																		2

*In 2022, Hawaii and Maryland added rear facing through age two or older laws.*

Advocates relies on the research and recommendations of experts in child passenger safety to inform our ratings criteria. We consistently monitor their findings and data with the goal of aligning to current best practices. When new updates or developments are released, we will consider changes to our optimal law definitions in the future.









# TEEN DRIVING

GRADUATED DRIVER LICENSING (GDL) PROGRAMS

## Issue

Teen and young adult novice drivers are more likely to be involved in fatal crashes because they lack driving experience and tend to take greater risks.

## Impact

Motor vehicle crashes are a leading killer of teens in the U.S. In crashes involving young drivers, fatalities totaled 5,037 in 2020, an increase of 15% from 2019.

## Solutions

Laws, Technology,  
and Roadway Safety  
Infrastructure

**GDL programs introduce teens to the driving experience gradually by phasing in full driving privileges over time and in lower risk settings**

**Safety Technologies and Improved Safety Standards Can Protect Vehicle Occupants and Other Road Users**

- IIHS has found that if all vehicles in crashes with teen drivers were equipped with front crash prevention (forward collision warning (FCW) and/or AEB), LDW / lane keeping assist (LKA), and blind spot monitoring, 32% of crashes involving a teen driver, 27% of injured teen drivers, and 36% of teen driver deaths could be prevented.

**Road Safety Infrastructure Improvements and the Safe System Approach**



# TEEN DRIVING

## GRADUATED DRIVER LICENSING (GDL) PROGRAMS

### The Facts

- Among the 5,037 fatalities in crashes involving young drivers in 2020, 1,885 were young drivers, 1,081 were passengers of young drivers, and the remaining 2,071 victims were non-occupants and the occupants of the other vehicles.
- The estimated economic cost of police-reported crashes involving young drivers between 15 and 20 years old was \$40.8 billion (2002). When adjusted for inflation only, these costs amount to \$64.77 billion in 2022 dollars.
- Widespread public concern about young drivers exists, with 58% “extremely” or “very” concerned about inexperienced new young drivers, according to an opinion poll commissioned by Advocates and conducted by ENGINE INSIGHTS in December 2021.
- The fatal crash rate per mile driven is nearly three times as high for 16- to 19-year-olds as it is for ages 20 and over. Risk is highest at ages 16-17.
- In states which have adopted GDL programs, studies have found overall crash reductions among teen drivers of about 10 to 30 percent.



- A 2010 survey conducted by IIHS shows that parents favor GDL laws which are as strict as or even stricter than currently exist in any state.
- Almost three-quarters (74%) of teens approve of a single, comprehensive law which incorporates the key elements of GDL programs.

## OLDER TEEN AND YOUNG ADULT NOVICE DRIVERS

Studies have shown that GDL programs have contributed to a decline in teen driver crashes. However, older teen and young adult novice drivers need but are missing out on the safety benefits of GDL programs. Aging out of GDL is a problem because drivers who begin the licensing process at age 18, 19 or 20 still have a high crash risk due to inexperience and brain development. Research from CHOP CIRP and AAA shows that, “about one-third of all drivers are not licensed by age 18, and by age 21, about 20% of all young adults still are not licensed.” A study showed that while GDL programs likely have contributed to a significant decline in teen driver crashes over the decade of 2005 to 2014, the improvements are not as strong for 18- to 20-year-olds who have aged out of GDL.

GDL programs that extend beyond the mid-teen years cover a broader population of novice drivers and may experience additional safety benefits. A new study from CHOP CIRP found that, “drivers who were licensed at age 18, making them exempt from comprehensive licensing requirements, had the highest crash rates in the first year of licensure of all those licensed under the age of 25.”

[Click here to learn more](#)







# IMPAIRED DRIVING

## *Issue*

Alcohol impaired driving is a persistent factor in crash fatalities and injuries on our roadways, accounting for 30% of deaths each year on average.

## *Impact*

In 2020, 11,654 people were killed in motor vehicle crashes involving drivers with a blood alcohol concentration (BAC) of .08% or higher.

## *Solutions*

Laws, Technology,  
and Roadway Safety  
Infrastructure

### **Ignition Interlock Devices (IIDs) for All-Offenders and Open Container Laws**

### **Safety Technologies and Improved Safety Standards Can Protect Vehicle Occupants and Other Road Users**

- According to research from IIHS released in July 2020, impaired driving prevention technology has the potential to drastically reduce impaired driving fatalities. IIHS finds that alcohol-detection systems could save more than 9,000 lives a year in the U.S., accounting for more than 25% of road fatalities.
- Proven collision avoidance systems in vehicles including AEB, LDW, BSD, rear AEB, and rear-cross traffic alert should be required.

### **Road Safety Infrastructure and the Safe System Approach**



# IMPAIRED DRIVING

## The Facts

- NHTSA has identified alcohol-impaired driving as one of “three major behavioral factors,” that contributed to dramatic crash fatality increases from 2019 to 2020.
- An average of one alcohol-impaired driving fatality occurred every 45 minutes in 2020.
- In 2010, the estimated total comprehensive costs of drunk driving were more than \$200 billion annually. Accounting for inflation only, that amounts to more than \$261 billion in 2022 dollars.
- Concern about impaired driving is extensive with 80% of respondents “very” or “extremely” concerned about drunk or drug impaired driving, according to a December 2021 opinion poll commissioned by Advocates and conducted by ENGINE INSIGHTS.
- A common misconception is that most people who are convicted of their first drunk driving offense are social drinkers who made one mistake. However, studies show that the average first offender will have driven drunk 87 times before getting arrested.
- According to the CDC, adult drivers admitted they drank too much and got behind the wheel approximately 111 million times in 2014, which equals over 300,000 incidents of drinking and driving each day. However, only 1.1 million, or approximately one percent of that 111 million, were arrested for driving under the influence that year.
- Nationwide between 2006 and 2020, IIDs prevented 3.78 million attempts to drive drunk, according to a 2022 report from Mothers Against Drunk Driving (MADD). This included 390,456 attempts in 2020, more than 1,000 every day.
- There is clear public support for IIDs for all convicted drunk drivers, with surveys showing between 69 and 88 percent of respondents in favor of requiring IIDs for all convicted driving under the influence (DUI) offenders, even if it's their first conviction.



- 82% of offenders themselves believe the IID was effective in preventing them from driving after drinking.
- When IIDs are installed, they are associated with an approximately 70% reduction in repeat offenses for impaired driving.

[Click here to learn more](#)



# IMPAIRED DRIVING

## The Facts

### .05% BAC LAWS

**A**t .05% BAC, a driver exhibits signs of cognitive and physical impairment including reduced coordination and ability to track moving objects, difficulty steering, and diminished response to emergency driving situations. Employed around the world to curb drunk driving with approximately 100 countries instituting .05% or lower BAC policy, this proven countermeasure remains under-used in the U.S. In 2018, Utah became the first state to enforce a .05% BAC limit. NHTSA's review of the impact of the new law in Utah during the first year that the law went into effect has yielded some excellent results. Between 2016 and 2019, the fatal crash rate decreased by 19.8% and the fatality rate per vehicle miles travelled dropped by 18.3%. Additionally, the number of drivers testing positive for any alcohol declined by 14.6%, and alcohol-impaired driving arrests did not climb sharply. Further, alcohol sales from 2012 through 2018 increased as did the net profit from alcohol sales in 2019, 2020 and 2021 according to the Utah Department of Alcohol and Beverage Control. Similar patterns occurred in sales tax revenues from restaurants, rental cars, hotels, and resorts, as well as in air travel into the state and visitors to parks. If all states lowered the BAC limit while driving to .05%, the U.S. could experience an 11% or greater decline in fatal alcohol-involved crashes, saving 1,790 lives annually. Public health researchers, experts, a coalition of safety advocates and the NTSB agree that driving at .05% BAC or higher is dangerous and state laws lowering BAC will reduce the horrific toll of deaths and injuries caused by drunk driving. While not yet rated in this report, all states should adopt a .05% BAC law.

### MARIJUANA IMPAIRED DRIVING

**S**tates have enacted and continue to advance measures to permit marijuana use, medical, recreational or both. While it is definitive that marijuana use causes impairment, identifying the causal link between marijuana use, crashes, fatalities and injuries is unresolved. Furthermore, when drug and alcohol use are combined, known as "polyuse," impairment can be amplified. Our priorities to curb impaired driving include: requirements for advanced impaired driving prevention technology and crash avoidance technology as standard in all new cars; acceleration of research to identify a causal link between marijuana use, impairment, and crashes; determination of a federal impairment standard for marijuana impaired driving (noting that current research does not support a *per se* level); development of verified roadside testing technology; improvement of data collection and analysis; and, allocation of adequate resources for labs and law enforcement training.







# D I S T R A C T E D   D R I V I N G

## *Issue*

Distracted driving is a major contributor to motor vehicle crashes, deaths and injuries on our roads. The use of electronic devices for communications (such as text messaging, video calls, and apps) and entertainment can readily distract drivers from the driving task as found by safety research, studies and data.

## *Impact*

In 2020, 3,142 people were killed in crashes involving a distracted driver according to NHTSA, accounting for 8% of all crash fatalities. Non-occupants (pedestrians, pedalcyclists, and others) accounted for almost 19% (587) of distraction-affected fatalities in 2020.

## *Solutions*

Laws, Technology,  
and Roadway Safety  
Infrastructure

### **Comprehensive State Laws to Deter Distracted Driving**

#### **Safety Technologies and Improved Safety Standards Can Protect Vehicle Occupants and Other Road Users**

- Proven collision avoidance systems in vehicles including AEB, LDW, BSD, rear AEB, and rear-cross traffic alert should be required.
- Driver monitoring systems (DMS) for passenger motor vehicles can help to prevent and/or mitigate crashes caused by impairment, fatigue, distraction, driver disengagement, automation complacency, and the foreseeable misuse of automated driving systems.

#### **Road Safety Infrastructure Improvements and the Safe System Approach**



# DISTRACTED DRIVING

## The Facts

- Crashes in which at least one driver was identified as being distracted imposed an economic cost of \$40 billion in 2010. Adjusted for inflation only, that amounts to \$52 billion in 2022 dollars.
- The true impact of distracted driving remains unclear due to issues with the underreporting, including differences in police crash report coding and database limitations.
- Crash risk increases dramatically – as much as four times higher – when a driver is using a mobile phone, with no significant safety difference between hand-held and hands-free phones observed in many studies.
- A study by the Virginia Tech Transportation Institute found that text messaging increased the risk of a safety-critical driving event (i.e., crashes, near-crashes, crash-relevant conflicts, and unintentional lane deviations) by 23.2 times.
- Sending or receiving a text message causes the driver's eyes to be off the road for an average of 4.6 seconds. When driving 55 miles per hour, this is the equivalent of driving the entire length of a football field blind.
- According to NHTSA, the percentage of drivers visibly manipulating hand-held devices while driving increased by 127% between 2012 and 2021.
- The findings of three surveys conducted between February and March 2022 confirm the prevalence of device use while driving:
  - A February 2022 survey commissioned by State Farm found that among licensed drivers:
    - » 55% “always” or “often” read or send text messages while driving.
    - » 51% “always” or “often” hold the phone while talking.
    - » 49% “always” or “often” interact with cell phone apps.
  - A March 2022 survey commissioned by Advocates and Selective Insurance Group found:
    - » 70% of licensed drivers have used a mobile device while driving for personal reasons in the last 90 days.
    - » Nearly one in three Americans (31%) have either been in or know someone who has been in a crash that occurred while a driver was using a mobile device.



Over recent years, smart phone capability and usage and the broadening range of distracting electronic communication platforms and options (including apps, social media, gaming, video chatting) has grown rapidly. Device use also can be accomplished without holding or consistently physically engaging with a device (voice-to-text and/or dash mounted options). Laws that ban hand-held device use yet broadly permit hands-free use, including distracted viewing activities, exacerbate cognitive and visual distraction. Distracting viewing should be restricted. Advocates is undertaking a detailed analysis and review of state distracted driving laws that may affect our ratings in future *Roadmap to Safety* reports.

- » More than half of Americans have seen people driving while distracted by a mobile device in the past two weeks (56%).
- » When asked about strategies to effectively reduce distracted driving or its impacts, 58% indicated advanced safety technologies and 50% affirmed comprehensive state laws.
- A March 2022 survey commissioned by Nationwide Insurance found that:
  - » 34% of drivers believe it is very safe to hold your phone while driving.
  - » Half of those surveyed (51%) had held a cell phone to talk, text or use an app while driving, despite 66% saying that such behavior is dangerous.

[Click here to learn more](#)







# AUTOMATED ENFORCEMENT TO CURB SPEED

## *Issue*

Excess speed can contribute to both the frequency and severity of motor vehicle crashes.

## *Impact*

Twenty-seven percent of fatalities in 2021, totaling 11,780 people, occurred in speeding related crashes. This is a five percent increase from 2020, which saw a 17% increase from the previous year.

## *Solutions*

Laws, Technology  
and Roadway Safety  
Infrastructure

### **Automated Enforcement Programs Augment Traditional Enforcement and are Effective in Deterring Excessive Speed on Our Roadways**

### **Safety Technologies and Improved Safety Standards Can Protect Vehicle Occupants and Other Road Users**

- Proven collision avoidance systems in vehicles including AEB, LDW, BSD, rear AEB, and rear-cross traffic alert should be required.
- Speed assistance systems, such as intelligent speed assistance (ISA), can provide information to drivers about present speed limits, warn drivers when a car's speed is above the limit, prevent a car from exceeding the speed limit, or maintain a set speed.
- Vehicle-to-everything (V2X) technology offers the potential to improve safety by relaying signals to the vehicle about upcoming traffic lights and speed limits, among other messaging.

### **Road Safety Infrastructure Improvements and the Safe System Approach**



# AUTOMATED ENFORCEMENT TO CURB SPEED

## The Facts

- NHTSA has identified speeding as one of “three major behavioral factors” that contributed to the dramatic spike in overall traffic fatalities from 2019 to 2020.
- Small changes in speed can have a big impact on safety. Crash tests conducted in 2019 showed that modest five to ten miles-per-hour (mph) increases in speed can have a severe impact on a driver’s risk of injury or even death.
- Speed increases have major implications for pedestrians. The average risk of death for a pedestrian is 10% at an impact speed of 23 mph, 25% at 32 mph and 50% at 42 mph.
- Speed-related crashes cause \$52 billion in economic costs and \$203 billion in comprehensive costs. These costs account for 21% of all economic costs and 24% of all societal harm (measured as comprehensive costs) from motor vehicle crashes. If these costs were updated for inflation alone, in 2022 they would equate to \$67 billion in economic costs and \$263 billion in comprehensive costs.



- Drivers acknowledge that excess speed is dangerous, yet there is a disconnect in their actions, according to the 2020 Traffic Safety Culture Index from AAA:
  - » Just over 45% of drivers surveyed drove 15 mph over the speed limit on a freeway in the past month, even though 80% of those surveyed say doing so is moderately to extremely dangerous.
  - » More than 35% of drivers surveyed drove 10 mph over the speed limit on a residential street in the past month, even though 88% of those surveyed believe doing so is moderately to extremely dangerous.
- Sixty-eight (68) percent of respondents in a December 2021 survey are “extremely” or “very” concerned about speeding, according to an opinion poll commissioned by Advocates and conducted by ENGINE INSIGHTS.
- A 2020 review by the Congressional Research Service (CRS) found that speed camera programs are effective in reducing speeding and/or crashes near cameras.
- Speed cameras alone resulted in a 19% reduction in the likelihood that a crash resulted in a fatal or incapacitating injury.

[Click here to learn more](#)



# AUTOMATED ENFORCEMENT TO CURB SPEED

In 2021, AAA, Advocates, Governors Highway Safety Association, IIHS and the National Safety Council [jointly released](#) the Automated Enforcement (AE) Checklist to convey their support for the proven technology and to help communities implement successful AE programs.



## AUTOMATED ENFORCEMENT PROGRAM CHECKLIST

For red light cameras and automated speed enforcement

Automated enforcement is an effective tool to make roads safer. Research shows that red light cameras reduce violations and injury crashes, especially the violent front-into-side crashes most associated with red light running. Speed cameras have been shown to reduce vehicle speeds, crashes, injuries and fatalities. Both types of programs should be designed, implemented and administered properly. Poorly run programs are less likely to be durable and may undermine support for automated enforcement generally.

Speed and red light camera programs augment traditional enforcement to improve traffic safety by deterring dangerous driving behaviors. Automated enforcement does not require traffic stops, and well-designed programs can improve safety for all road users in a neutral manner.

Successful programs are transparent and have a strong public information component. Communities should take into account racial and economic equity when making decisions about camera placement and fines. Automated enforcement programs should be data-driven and should prioritize safety, not revenue. In fact, communities should expect that revenue will decline over time as fewer drivers run red lights or violate speed limits.

This checklist assumes your community is already legally authorized to set up a program. It provides a minimum list of considerations to help you follow best practices. The goal is to operate a successful program that reduces crashes and prevents deaths and injuries while maintaining strong public support. Automated enforcement can be integrated into broader efforts to discourage unsafe driving that includes optimizing speed limits for safety and improving roadway design.



### ✓ FIRST STEPS

- Identify problem intersections and roadways.
  - Assess violation and crash data.
  - Conduct field observations.
  - Collect resident and roadway user input.
- Consider what role automated enforcement should play as part of a comprehensive traffic safety strategy.
- Make any engineering or signage changes needed to improve drivers' compliance with the law.

• Ensure the road geometry conforms with guidelines from the [American Association of State Highway and Transportation Officials](#), [National Association of City Transportation Officials](#) guidance or state road design manuals, as appropriate.

• Remove sightline obstructions of signals and signage.

#### For red light cameras:

• Ensure that yellow light timing conforms to the [Manual on Uniform Traffic Control Devices](#) and [Institute of Transportation Engineers](#) guidelines.

#### For automated speed enforcement:

• Ensure the speed limit is appropriate and accounts for all road users. Follow guidance and use tools from the Federal Highway Administration, [Institute of Transportation Engineers](#), and the [National Association of City Transportation Officials](#).

• Ensure the speed limit is appropriate for special conditions, such as work zones and school zones.

• Assess whether engineering changes could be made to promote compliance with the speed limit.

• Ensure adequate posting of speed limits.

- Establish an advisory committee comprised of stakeholders.
  - Consider including law enforcement, transportation department employees, victim advocates, equity and civil rights advocates, school officials, community residents, first responders, health officials and the courts.
  - Outline the committee's role. This may include developing guiding principles related to safety, equity, and transparency, as well as other aspects of the program.
  - Ensure committee meetings are open to the public and deliberations are transparent.

- Meet with the media, including newspaper editorial boards, to build support and educate the public.





# AUTOMATED ENFORCEMENT TO CURB SPEED

## ✓ SECOND STEPS

- Make program design decisions, consulting with the advisory committee as appropriate.

### Program design considerations

Target violations with the greatest safety consequences. For example, you might decide not to ticket for right-turn-on-red violations when pedestrians, bicyclists, and oncoming vehicles are not present or to limit violations in work zones to when workers are present, provided the road configuration has not also been altered for construction.

Establish a reasonable fine structure. Create options for indigent violators such as payment plans or other alternatives.

Establish a threshold that must be crossed before a vehicle is photographed for a violation of red light running or speeding (i.e., a period after a light turns red or a certain mph over the posted speed). The point is to target flagrant, rather than marginal, infractions.

Programs should include a process for evidence review by appropriately trained personnel to determine if a violation occurred and issue a citation if warranted.

Establish clear procedures for contesting an alleged violation. Consider options to contest online or by mail.

When possible, red light camera violations should be recorded in real time video, and videos of the offense should be made available to the vehicle owner for review via the Internet.

Fines in excess of program costs should be allocated to transportation safety programs.

- Use safety data gathered in the first steps to determine camera locations, ensuring that particular neighborhoods are neither overlooked nor overrepresented.
- Publicize the extent of the safety problem and the need for innovative solutions.
- Secure a vendor and establish payment based on the vendor's actual costs, not the number of citations.
- Publicize procedures for contesting an alleged violation.
- Create a website and social media plan to publicize program details, such as how to pay and dispute tickets. Establish a method for answering questions accurately and in a timely manner.
- Develop an emergency action plan for handling problems, such as system malfunctions.

## ✓ IMPLEMENTATION

- Hold a kickoff event with advisory committee members. Introduce a well-developed and sustained public education campaign focused on improving safety by changing driver attitudes and behavior.
- Connect the program to overall roadway safety in the community and identify the goal of zero tickets resulting from changes in driver behaviors.
- Install prominent warning signs.
- Start with a probationary period during which only warnings are issued.
- Follow current guidance from the U.S. Department of Transportation for implementation and operation of automated enforcement devices.
- Allow for due process. Minimize the number of days between the violation and citation issuance.

## ✓ LONG TERM

- Publicize changes, including new camera locations. Reinstate the probationary period before ticketing begins at new locations.
- Monitor program operation and publicize results. Undertake periodic reviews and ensure racial, economic and other equity issues and public concerns are addressed.
- Require regular field reviews. Verify monthly camera calibration and synchronization with signals.
- Require regular evaluations of the traffic safety benefits of the program by collecting crash and infraction data. Before-and-after comparisons must use control intersections and roadways. Include control intersections and roadways that are not subject to spillover effects.
- Regularly meet with the advisory committee and media to review program status and sustain public support.
- Continue to improve programs based on new and updated guidance and best practices and look for opportunities to expand automated enforcement use.
- Consider other changes, including roadway design improvements, in order to reduce opportunities for unsafe driving.







# OVERALL STATE LAWS RATING CHART AND MAP

In this report, states are scored based on their ratings in the six issue areas displayed on the preceding pages. For each issue area, a green or "GOOD" rating = 2 points, yellow or "CAUTION" = 1 point, and red or "DANGER" = 0 points.

In the "overall" chart and map below, individual state rating scores for each issue area are totaled for a state's overall score and rating. The maximum a state can achieve is 12 points.

## OVERALL STATE RATING & SCORE KEY:

**GOOD**

Eight or more total points  
– 5 states plus DC

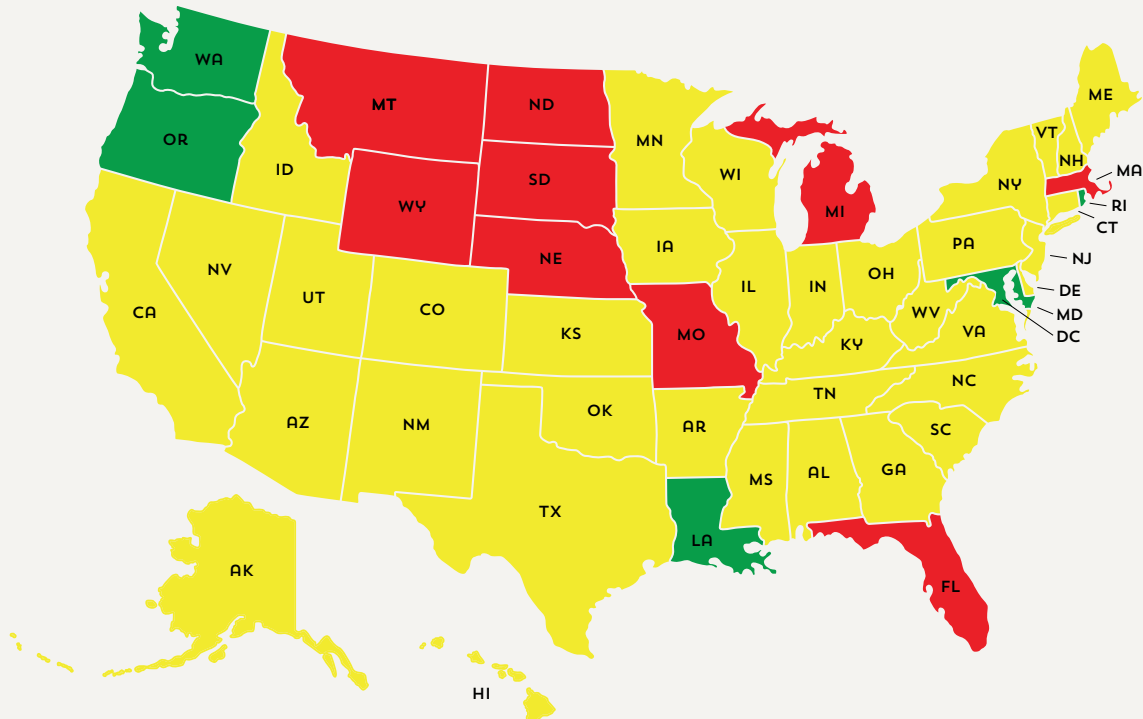
**CAUTION**

Four to seven total points  
– 36 states

**DANGER**

Zero to three total points  
– 9 states

OVERALL RATINGS & SCORES		ALABAMA	ALASKA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	DC	FLORIDA	GEORGIA	HAWAII	IDAHO	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE	NEW JERSEY	NEW MEXICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	UTAH	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING				
Occupant Protection		1	1	0	0	2	0	0	1	2	0	1	1	0	1	1	0	0	1	2	1	1	0	0	1	2	0	0	0	0	1	1	2	1	0	0	0	2	0	1	1	0	1	1	1	0	0	2	1	1	0	2	1	1	0	
Child Passenger Safety		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Teen Driving: GDL Programs		0	1	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	
Impaired Driving		2	1	2	2	1	2	1	1	2	1	1	1	2	2	1	2	2	2	2	1	2	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	2	2	1	2	1	1	1	2	2	2	1	2	2	2	1	0			
Distracted Driving		1	1	1	2	1	2	2	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	0	0	1	2	2	2	1	2	2	1	1	2	1	2	1	1	2	2	2	2	1	2	2	2	1	0			
Automated Enforcement to Curb Speed		2	0	2	1	0	2	1	2	2	0	2	0	0	2	0	2	0	2	0	2	0	2	0	0	0	0	1	0	0	1	0	0	2	2	0	0	2	0	2	2	2	2	0	0	2	0	1	0	2	2	0	0			





## OVERALL STATE LAWS RATING CHART AND MAP

**B**ased on Advocates' safety recommendations, states need to adopt 494 countermeasures:

- 16 states need an optimal primary enforcement seat belt law for front seat passengers.
- 30 states need an optimal primary enforcement seat belt law for rear seat passengers.
- 32 states need an optimal all-rider motorcycle helmet law.
- 32 states need a rear facing through age 2 or older child passenger safety law.
- 33 states and DC need an optimal booster seat law.
- 48 states and DC need an optimal rear seat through age 12 law.
- 192 GDL laws need to be adopted to ensure the safety of novice drivers, no state meets all the criteria recommended in this report.
- 27 critical impaired driving laws are needed in 26 states.
- 4 states need an optimal all-driver text messaging restriction.
- 19 states need a GDL cell phone restriction.
- 27 states need to permit automated enforcement by law.
- 32 states do not have automated enforcement in use.



# STATES AT A GLANCE



On the following pages, each state and DC are represented in alphabetical order with the following information:

- The number of people killed in motor vehicle crashes in each state for the year 2021, as reported by NHTSA.
- The total number of fatalities over the past 10 years, as reported by NHTSA.
- The annual economic cost of motor vehicle crashes to the state, as reported in The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (NHTSA) and adjusted for inflation.
- The state's rating represents its overall rating (Green, Yellow or Red) based on the chart on page 40 of this report.
- A list of the optimal lifesaving laws that the state has adopted and those that are still needed.

States are credited with having laws only if their laws meet Advocates' optimal criteria (definitions on pages 6 and 7).

- Only 5 states (LA, MD, OR, RI, WA) and DC received a Green rating, showing significant advancement toward adopting all of Advocates' recommended optimal laws.
- 36 states (AL, AK, AZ, AR, CA, CO, CT, DE, GA, HI, ID, IL, IN, IA, KS, KY, ME, MN, MS, NV, NH, NJ, NM, NY, NC, OH, OK, PA, SC, TN, TX, UT, VT, VA, WV, WI) received a Yellow rating, indicating that improvement is needed because of gaps in Advocates' recommended optimal laws.
- 9 states (FL, MA, MI, MO, MT, NE, ND, SD, WY) received a Red rating, indicating these states fall dangerously behind in adoption of Advocates' recommended optimal laws.

**NOTE:** On the following pages...

**S** = Highway Safety Law is **Secondary** Enforcement  
(Advocates gives no credit for any law that is subject to secondary enforcement.)

**DE** = **Driver Education** exemption included in the GDL provision  
(Advocates gives no credit for any GDL provision that is exempted based on driver education.)



# STATES AT A GLANCE

## ALABAMA

**CAUTION**

**9,223** = Ten-year fatality total  
**987** = 2021 fatalities  
**\$5.804 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- GDL Cell Phone Restriction

## ALASKA

**CAUTION**

**689** = Ten-year fatality total  
**67** = 2021 fatalities  
**\$768 Million** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Open Container Law
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## ARIZONA

**CAUTION**

**9,459** = Ten-year fatality total  
**1,123** = 2021 fatalities  
**\$5.427 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- GDL Cell Phone Restriction



# STATES AT A GLANCE

## ARKANSAS

**CAUTION**

**5,517** = Ten-year fatality total  
**690** = 2021 fatalities  
**\$3.096 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Automated Enforcement in Use

## CALIFORNIA

**CAUTION**

**35,792** = Ten-year fatality total  
**4,258** = 2021 fatalities  
**\$25.947 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Open Container Law
- All-Driver Text Messaging Restriction

### HIGHWAY LAWS NEEDED

- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## COLORADO

**CAUTION**

**5,793** = Ten-year fatality total  
**696** = 2021 fatalities  
**\$5.414 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision





# STATES AT A GLANCE

## CONNECTICUT

**CAUTION**

**2,817** = Ten-year fatality total  
**327** = 2021 fatalities  
**\$6.332 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Open Container Law
- Automated Enforcement in Use

## DELAWARE

**CAUTION**

**1,202** = Ten-year fatality total  
**137** = 2021 fatalities  
**\$887 Million** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law

## DC

**GOOD**

**268** = Ten-year fatality total  
**39** = 2021 fatalities  
**\$1.115 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision



# STATES AT A GLANCE

## FLORIDA

**DANGER**

**29,960** = Ten-year fatality total  
**3,753** = 2021 fatalities  
**\$13.948 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Open Container Law
- All-Driver Text Messaging Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## GEORGIA

**CAUTION**

**14,530** = Ten-year fatality total  
**1,806** = 2021 fatalities  
**\$13.996 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Open Container Law
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- GDL Cell Phone Restriction

## HAWAII

**CAUTION**

**1,047** = Ten-year fatality total  
**95** = 2021 fatalities  
**\$749 Million** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law
- Permits Automated Enforcement by Law
- Automated Enforcement in Use



# STATES AT A GLANCE

## IDAHO

**CAUTION**

**2,256** = Ten-year fatality total  
**286** = 2021 fatalities  
**\$1.150 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Nighttime Driving Restriction Provision
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Passenger Restriction Provision
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## ILLINOIS

**CAUTION**

**10,632** = Ten-year fatality total  
**1,357** = 2021 fatalities  
**\$14.123 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision

## INDIANA

**CAUTION**

**8,368** = Ten-year fatality total  
**930** = 2021 fatalities  
**\$8.271 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Passenger Restriction Provision
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use



# STATES AT A GLANCE

## IOWA

**CAUTION**

**3,404** = Ten-year fatality total  
**356** = 2021 fatalities  
**\$2.839 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision

## KANSAS

**CAUTION**

**4,060** = Ten-year fatality total  
**433** = 2021 fatalities  
**\$3.172 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## KENTUCKY

**CAUTION**

**7,463** = Ten-year fatality total  
**794** = 2021 fatalities  
**\$5.661 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use



# STATES AT A GLANCE

## LOUISIANA

**GOOD**

7,747 = Ten-year fatality total  
976 = 2021 fatalities  
\$7.384 Billion = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Booster Seat Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law

## MAINE

**CAUTION**

1,547 = Ten-year fatality total  
162 = 2021 fatalities  
\$1.691 Billion = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- 70 Hours of Supervised Driving Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- Nighttime Driving Restriction Provision
- Open Container Law
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## MARYLAND

**GOOD**

5,160 = Ten-year fatality total  
542 = 2021 fatalities  
\$5.808 Billion = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision



# STATES AT A GLANCE

## MASSACHUSETTS

**DANGER**

### HIGHWAY LAWS ADOPTED

- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

**3,611** = Ten-year fatality total

**413** = 2021 fatalities

**\$7.571 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## MICHIGAN

**DANGER**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Booster Seat Law
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

**10,044** = Ten-year fatality total

**1,147** = 2021 fatalities

**\$12.455 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## MINNESOTA

**CAUTION**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

**3,943** = Ten-year fatality total

**500** = 2021 fatalities

**\$3.966 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use



# STATES AT A GLANCE

## MISSISSIPPI

**CAUTION**

**6,664** = Ten-year fatality total  
**755** = 2021 fatalities  
**\$3.527 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction

### HIGHWAY LAWS NEEDED

- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## MISSOURI

**DANGER**

**8,902**= Ten-year fatality total  
**1,016** = 2021 fatalities  
**\$7.214 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Automated Enforcement in Use

## MONTANA

**DANGER**

**2,047** = Ten-year fatality total  
**243** = 2021 fatalities  
**\$1.165 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Open Container Law

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use



# STATES AT A GLANCE

## NEBRASKA

**DANGER**

### HIGHWAY LAWS ADOPTED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- All-Offender Ignition Interlocks
- Open Container Law

**2,269** = Ten-year fatality total

**218** = 2021 fatalities

**\$1.680 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## NEVADA

**CAUTION**

### HIGHWAY LAWS ADOPTED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law

**3,120** = Ten-year fatality total

**386** = 2021 fatalities

**\$2.566 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- GDL Cell Phone Restriction
- Automated Enforcement in Use

## NEW HAMPSHIRE

**CAUTION**

### HIGHWAY LAWS ADOPTED

- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

**1,165** = Ten-year fatality total

**123** = 2021 fatalities

**\$1.783 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use





# STATES AT A GLANCE

## NEW JERSEY

**CAUTION**

**5,889** = Ten-year fatality total  
**709** = 2021 fatalities  
**\$16.625 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Minimum Ages for Learner's Permit and Licensing
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Seat Through Age 12 Law
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## NEW MEXICO

**CAUTION**

**3,839** = Ten-year fatality total  
**479** = 2021 fatalities  
**\$2.295 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision

## NEW YORK

**CAUTION**

**10,686** = Ten-year fatality total  
**1,139** = 2021 fatalities  
**\$19.781 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- GDL Cell Phone Restriction



# STATES AT A GLANCE

## NORTH CAROLINA

**CAUTION**

**14,088** = Ten-year fatality total

**1,627** = 2021 fatalities

**\$10.262 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## NORTH DAKOTA

**DANGER**

**1,220** = Ten-year fatality total

**102** = 2021 fatalities

**\$916 Million** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Booster Seat Law
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## OHIO

**CAUTION**

**11,339** = Ten-year fatality total

**1,351** = 2021 fatalities

**\$13.137 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Open Container Law
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction



# STATES AT A GLANCE

## OKLAHOMA

**CAUTION**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction

**6,766** = Ten-year fatality total  
**774** = 2021 fatalities  
**\$3.776 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## OREGON

**GOOD**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

**4,488** = Ten-year fatality total  
**599** = 2021 fatalities  
**\$2.294 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision

## PENNSYLVANIA

**CAUTION**

### HIGHWAY LAWS ADOPTED

- Rear Facing Through Age 2 or Older Law
- Open Container Law
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

**11,852** = Ten-year fatality total  
**1,234** = 2021 fatalities  
**\$7.592 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- GDL Cell Phone Restriction



# STATES AT A GLANCE

## RHODE ISLAND

**GOOD**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

**610** = Ten-year fatality total

**67** = 2021 fatalities

**\$2.075 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision

## SOUTH CAROLINA

**CAUTION**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Nighttime Driving Restriction Provision
- Open Container Law
- All-Driver Text Messaging Restriction

**9,686** = Ten-year fatality total

**1,144** = 2021 fatalities

**\$5.248 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## SOUTH DAKOTA

**DANGER**

### HIGHWAY LAWS ADOPTED

- Passenger Restriction Provision
- Open Container Law
- All-Driver Text Messaging Restriction

**1,305** = Ten-year fatality total

**149** = 2021 fatalities

**\$934 Million** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- All-Offender Ignition Interlocks
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use



# STATES AT A GLANCE

## TENNESSEE

**CAUTION**

**10,706** = Ten-year fatality total  
**1,318** = 2021 fatalities  
**\$7.353 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law

## TEXAS

**CAUTION**

**37,154** = Ten-year fatality total  
**4,573** = 2021 fatalities  
**\$22.114 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## UTAH

**CAUTION**

**2,641** = Ten-year fatality total  
**332** = 2021 fatalities  
**\$2.238 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Automated Enforcement in Use



# STATES AT A GLANCE

## VERMONT

**CAUTION**

### HIGHWAY LAWS ADOPTED

- All-Rider Motorcycle Helmet Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

**632** = Ten-year fatality total

**77** = 2021 fatalities

**\$698 Million** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## VIRGINIA

**CAUTION**

### HIGHWAY LAWS ADOPTED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- All-Offender Ignition Interlocks
- All-Driver Text Messaging Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

**8,041** = Ten-year fatality total

**968** = 2021 fatalities

**\$6.485 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- Open Container Law
- GDL Cell Phone Restriction

## WASHINGTON

**GOOD**

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

**5,256** = Ten-year fatality total

**652** = 2021 fatalities

**\$5.798 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS NEEDED

- Booster Seat Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision



# STATES AT A GLANCE

## WEST VIRGINIA

**CAUTION**

**2,898** = Ten-year fatality total  
**293** = 2021 fatalities  
**\$1.923 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Booster Seat Law
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Rear Seat Belt Law
- Rear Facing Through Age 2 or Older Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## WISCONSIN

**CAUTION**

**5,816** = Ten-year fatality total  
**597** = 2021 fatalities  
**\$5.898 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- Open Container Law
- All-Driver Text Messaging Restriction
- GDL Cell Phone Restriction

### HIGHWAY LAWS NEEDED

- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

## WYOMING

**DANGER**

**1,238** = Ten-year fatality total  
**113** = 2021 fatalities  
**\$1.022 Billion** = Annual cost due to motor vehicle crashes

### HIGHWAY LAWS ADOPTED

- All-Driver Text Messaging Restriction

### HIGHWAY LAWS NEEDED

- Primary Enforcement Front Seat Belt Law
- Primary Enforcement Rear Seat Belt Law
- All-Rider Motorcycle Helmet Law
- Rear Facing Through Age 2 or Older Law
- Booster Seat Law
- Rear Seat Through Age 12 Law
- Minimum Ages for Learner's Permit and Licensing
- 70 Hours of Supervised Driving Provision
- Nighttime Driving Restriction Provision
- Passenger Restriction Provision
- All-Offender Ignition Interlocks
- Open Container Law
- GDL Cell Phone Restriction
- Permits Automated Enforcement by Law
- Automated Enforcement in Use

# SOURCE INFORMATION

Thanks to the many individuals and organizations whose websites and staff provided background and state law information for the 2023 *Roadmap to Safety*, including:

American Academy of Pediatrics (AAP)  
[www.aap.org](http://www.aap.org)

American Automobile Association (AAA) Foundation for Traffic Safety  
[www.aaafoundation.org](http://www.aaafoundation.org)

American Public Health Association (APHA)  
[www.apha.org](http://www.apha.org)

Children's Hospital of Philadelphia Center for Injury Research and Prevention (CHOP CIRP)  
<https://injury.research.chop.edu/>

Congressional Research Service  
<https://crsreports.congress.gov/>

Federal Highway Administration (FHWA)  
[www.fhwa.dot.gov](http://www.fhwa.dot.gov)

Federal Motor Carrier Safety Administration (FMCSA)  
[www.fmcsa.dot.gov](http://www.fmcsa.dot.gov)

Governors Highway Safety Association (GHSA)  
[www.ghsa.org](http://www.ghsa.org)

Insurance Institute for Highway Safety (IIHS)  
[www.iihs.org](http://www.iihs.org)

International Transport Forum  
[www.itf-oecd.org](http://www.itf-oecd.org)

Mothers Against Drunk Driving (MADD)  
[www.madd.org](http://www.madd.org)

National Conference of State Legislatures (NCSL)  
[www.ncsl.org](http://www.ncsl.org)

National Highway Traffic Safety Administration (NHTSA) and the National Center for Statistics and Analysis  
[www.nhtsa.dot.gov](http://www.nhtsa.dot.gov)

National Safety Council (NSC)  
[www.nsc.org](http://www.nsc.org)

National Transportation Safety Board (NTSB)  
[www.nts.gov](http://www.nts.gov)

NORC at the University of Chicago  
[www.norc.org](http://www.norc.org)

Students Against Destructive Decisions (SADD)  
[www.sadd.org](http://www.sadd.org)

U.S. Centers for Disease Control and Prevention (CDC)  
[www.cdc.gov](http://www.cdc.gov)

U.S. Department of Transportation (U.S. DOT)  
[www.transportation.gov](http://www.transportation.gov)



# SOURCE INFORMATION

- 2019 National and State Population Estimates, United States Census Bureau.
- 2020 Traffic Safety Culture Index, AAA, October 2021.
- Blueprint for Ending Distracted Driving, NHTSA, DOT HS 811 629, June 2012.
- Centers for Disease Control and Prevention (CDC) Impaired Driving: Get the Facts, June 2017.
- CDC, National Center for Injury Prevention and Control (NCIPC). WISQARS (Web-based Injury Statistics Query and Reporting System). U.S. Department of Health and Human Services, accessed November 2022.
- Crime in the United States: Table 29, Estimated Number of Arrests, U.S. Department of Justice, Federal Bureau of Investigation, 2014.
- Drinking and Driving Trips, Stops by the Police, and Arrests: Analyses of the 1995 Survey of Drinking and Driving Attitudes and Behavior, NHTSA, DOT HS 809 184, December 2000.
- Early Estimate of Motor Vehicle Traffic Fatalities for the First Half (January – June) of 2022, NHTSA, DOT HS 813 376, September 2022.
- Early Estimate of Motor Vehicle Traffic Fatalities in 2021, NHTSA, DOT HS 813 283, April 2022.
- Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2021, NHTSA, DOT HS 813 298, May 2022.
- Edelman Data & Intelligence, “Bad driving has Americans on Edge,” commissioned by Nationwide Insurance, March 2022.
- Effects of Automated Speed Enforcement in Montgomery County Maryland on Vehicle Speeds, Public Opinion and Crashes, Insurance Institute for Highway Safety, August 2016.
- Evaluation of Child Restraint System Effectiveness, NHTSA, DOT HS 813 047, December 2020.
- Flannagan CA, Analysis of Motorcycle Crashes: Comparison of 2012 to Previous Years, 18th Michigan Traffic Safety Summit, 2013.
- Foundation for Traffic Safety, 2017 Traffic Safety Culture Index, March 2018.
- Graduated Licensing Laws and Fatal Crashes of Teenage Drivers: A National Study, IIHS, June 2010.
- Ignition Interlock Report, Putting an End to Drinking and Driving Attempts, MADD, January 2022.
- Impact of Speeds on Drivers and Vehicles – Results from Crash Tests, AAA Foundation for Safety, Humanetics, and IIHS, January 2021.
- Increasing Alcohol Ignition Interlock Use website, CDC.
- IIHS, Fatality Facts 2020: Teenagers website.
- ITF (2021), Road Safety Annual Report 2021: The Impact of Covid-19, OECD Publishing, Paris.
- Kristy B. Arbogast, Jessica S. Jermakian, Michael J. Kallan and Dennis R. Durbin, “Effectiveness of Belt Positioning Booster Seats: An Updated Assessment,” Pediatrics 2009;124:1281, October 19, 2009.
- Liu BC, Ivers R, Norton R, Boufous S, Blows S, Lo SK, Helmets for preventing injury in motorcycle riders (Review), The Cochrane Library, Issue 1, 2009.
- MADD, How Technology Has Stopped 1.77 Million Drunk Drivers: A State by State Guide to Creating a Future of No More Victims, February 2016.

## SOURCE INFORMATION

Mayrose, James, Influence of the Unbelted Rear-seat Passenger on Driver Mortality: “The Backseat Bullet”, Academic Emergency Medicine, Volume 12, Issue 2. Article first published online: June 2008.

McEvoy, S.P.; Stevenson, M.R.; McCartt A.T.; Woodward, M.; Haworth, C; Palamara, P.; and Cercarelli, R. 2005. Role of mobile phones in motor vehicle crashes resulting in hospital attendance: a case-crossover study. *British Medical Journal* 331(7514):428; and Redelmeier, D.A. and Tibshirani, R.J. 1997. Association between cellular-telephone call and motor vehicle collisions. *The New England Journal of Medicine* 336:453-58.

Morse, BJ and DS Elliott; Hamilton County Drinking and Driving Study: 30 Month Report. Boulder, Colorado: University of Colorado, 1990.

Motorcycle Safety: Increasing Federal Flexibility and Identifying Research Priorities Would Help Support States’ Safety Efforts, GAO, GAO-13-42, 2012.

NORC: Fell JC & Scherer M, Estimation of the Potential Effectiveness of Lowering the Blood Alcohol Concentration (BAC) Limit for Driving from 0.08 to 0.05 Grams per Deciliter in the United States, 2017.

Overview of Motor Vehicle Crashes in 2020, NHTSA, DOT HS 813 266, March 2022.

Policy Statement – Child Passenger Safety, AAP, Committee on Injury, Violence, and Poison Prevention, 2018.

Potential Lives Saved By In-Vehicle Alcohol Detection Systems, IIHS, July 2020.

Public Concern About Roadway Safety, Engine’s Caravan Survey, Public Opinion Poll, January 2022.

Rear Seat Belt Use: Little Change in Four years, Much More To Do, Governors Highway Safety Association, November 2019, available at <https://www.ghsa.org/resources/RearBeltReport19>.

Revised Estimates of Child Restraint Effectiveness, NHTSA, DOT HS 96 855, December 1996.

Risk of Child Injury by Seat Row and Restraint Type, 1998-2002, Age 0-12 years, CHOP, 2014.

Safety Impact of Speed and Red Light Cameras, CRS, September 2020.

State Farm Enterprise Research Department, “What distracts you from driving safely?” April 2022.

Status Report, Safety Gains Ground, Vol. 49, No. 11, “Thinking About Safety in the Back Seat”, IIHS, December 23, 2014.

Teens Say “Yes” to Driving Restrictions that Make Roads Safe, Allstate Foundation, March 2011.

The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), NHTSA, DOT HS 812 013, May 2015, adjusted for inflation.

The Harris Poll, “Distracted Driving In America,” Commissioned by Selective Insurance and Advocates for Highway and Auto Safety, March 2022.

Traffic Safety Facts 2020: A Compilation of Motor Vehicle Crash Data, NHTSA, DOT HS 813 375, October 2022.

Traffic Safety Facts Research Note: Distracted Driving 2020, NHTSA, DOT HS 813 309, May 2022.

Traffic Safety Facts Research Note: Driver Electronic Device Use in 2021, NHTSA, DOT HS 813 357, August 2022.

Traffic Safety Facts, 2019 Data: Motorcycles, NHTSA, DOT HS 813 112, September 2021.

Traffic Safety Facts, 2020 Data: Alcohol-Impaired Driving, NHTSA DOT HS 813 294, April 2022.

Traffic Safety Facts, 2020 Data: Young Drivers, NHTSA, DOT HS 813 313, June 2022.

Traffic Safety Facts, Research Note: Motorcycle Helmet Use in 2021 – Overall Results, NHTSA, DOT HS 813 270, March 2022.

## SOURCE INFORMATION

Traffic Safety Facts. 2020 Data: Motorcycles, NHTSA, DOT HS 813 306, May 2022.

Traffic Safety Facts: 2020 Data, Occupant Protection in Passenger Vehicles, NHTSA, DOT HS 813 326, October 2022.

Traffic Safety Facts: Crash Stats, Early Estimates of Motor Vehicle Traffic Fatalities And Fatality Rates by Sub-Categories in 2021, NHTSA, DOT HS 813 298, May 2022.

Unbuckled in Back: An Overlooked Issue in Occupant Protection, Governors Highway Safety Association, November 2015.

Weiss, H., Ph.D., MPH, MS, Agimi, Y.L., MPH, and Steiner, C., MD, MPH, "Youth Motorcycle-Related Brain Injury by State Helmet Law Type: United States 2005 2007," Pediatrics, November 2010.

What is Distracted Driving? Key Facts and Statistics, DOT NHTSA, citing Olson, R.L., Hanowski, R.J., Hickman, J.S., Bocanegra, J.; "Driver Distraction in Commercial Vehicle Operations", VTTI, September 2009.

Williams, A.F; Braitman, K.A.; and McCartt, A.T. Views of parents of teenagers about licensing policies: a national survey. Arlington, VA: IIHS, 2010.

WISQARS, Leading Causes of Death Reports, 1981-2020, 2020, Top 10 leading causes of death, Ages 1 to 14, last queried Nov. 2022.

Yellman MA, Sauber-Schatz EK. Motor Vehicle Crash Deaths – United States and 28 Other High-Income Countries, 2015 and 2019. MMWR Morb Mortal Wkly Rep 2022;71:837–843.

## ACKNOWLEDGMENTS

Advocates would like to recognize the dedication and commitment of our Board of Directors. Their support and safety leadership have resulted in adoption of laws, regulations and programs that are saving lives, preventing injuries and containing costs resulting from motor vehicle crashes. And, on this 20th anniversary edition, we would like to give a special acknowledgment to longtime Board member Jack Gillis, former Executive Director and CEO of the Consumer Federation of America, for inspiring Advocates to formalize and print information we had been collecting and creating and turn it into what is now the *Roadmap to Safety*.

Advocates would like to thank Cathy Barzey, Lisa Drew, Tara Gill, Allison Kennedy, Shaun Kildare, Peter Kurdock, and Kim Levinson for their contributions to the 2023 *Roadmap to Safety*. A special shout out to Kit Kennedy, Kiran Kildare, Samira Kildare and Joey Kurdock for being our CPS “models.” Also, special thanks to Jamie Douglas of Daylight for the cover and redesign of the report, Bill Bronrott of Bronrott Communications for assisting with publicity and media relations, and WindRose Media for event production.

## ABOUT ADVOCATES FOR HIGHWAY AND AUTO SAFETY

Advocates for Highway and Auto Safety is an alliance of consumer, public health, safety and law enforcement groups and insurance companies and agents working together to make roads safe in the U.S. Advocates encourages adoption of federal and state laws, policies and programs that save lives and reduce injuries. By joining its resources with others, Advocates helps build coalitions to increase participation of a wide array of groups and stakeholders in policy initiatives which advance roadway and auto safety. For more information, please visit [www.saferoads.org](http://www.saferoads.org).

Advocates for Highway and Auto Safety  
750 First Street, NE, Suite 1130  
Washington, D.C. 20002  
202-408-1711  
Follow us on Twitter: @SafeRoadsNow



The 2023 *Roadmap to Safety* Report is dedicated to all those who have been killed or injured in motor vehicle crashes. We would like to acknowledge the heroic advocacy of the countless families of victims and survivors as well as injured crash survivors who have taken the tremendous loss they have suffered and fought tirelessly for change to end preventable crashes.

The photos displayed on this year's cover include just a small representation of the tragic toll inflicted each day on our roadways. Please note that for many crashes, there are numerous contributing factors. The descriptions below do not cover the totality of crash factors. Thank you to Kids and Car Safety, Mothers Against Drunk Driving, StopDistractions.org, Truck Safety Coalition and individuals for providing these photos.

Heather Miller (3/25/08), impaired driving crash	Phil LaValle (8/8/13), distracted driving crash
Bryan Kosc (8/12/13), truck crash	Aslyn Ryan (2/7/04), hot car incident
Mitchel Kiefer (9/19/16), distracted driving crash	Howard Stein (4/7/11), distracted driving crash
Ashley Johnson (5/11/10), distracted driving crash	Charly Jones (9/3/19), hot car incident
Dr. John Harsch (4/6/16), distracted driving crash	Kim Huntington (7/10/19), truck crash
Andrew Spencer McMorris (9/30/18), impaired driving crash	Clifton Gibbs (2/3/12), distracted driving crash
Dan Crittenden (4/29/15), distracted driving crash	Giselle Abbas (1/6/19), impaired driving crash
Dana Wood (10/15/02), truck crash	Issam Abbas (1/6/19), impaired driving crash
Bishop Collins (5/29/11), hot car incident	RJ Pryer (7/19/18), hot car incident
James Mooney (9/20/83), truck crash	Sophia Lyon (6/4/14), hot car incident
Natalia Salcido (5/9/15), teen driver crash involving distraction and speeding	Austin Lee Lockwood (6/10/18), impaired driving crash
Thomas Cestia (6/14/21), hot car incident	Rima Abbas (1/6/19), impaired driving crash
Blake Mulder (9/15/21), truck crash	Isabella Abbas (1/6/19), impaired driving crash
David Mathis (3/25/04), truck crash	Ali Abbas (1/6/19), impaired driving crash
Linda Doyle (9/3/08), distracted driving crash	Jessica Butler (5/26/17), distracted driving crash
Noah Leotta (12/10/15), impaired driving crash	Lukey McGee (12/10/19), frontover crash
Taylor Warner (11/13/10), seat back collapse	Sarah Haylett (10/17/08), distracted driving crash
Kelsey Raffaele (1/24/19), distracted driving crash	Julie Davis (4/15/09), distracted driving crash
Jeff Izer (10/10/93), truck crash	Allie White (9/29/19), distracted driving crash
Angie Dubuc (10/10/93), truck crash	Alex Todd (11/28/10), distracted driving crash
Bill Badger (12/23/04), truck crash	Maliki Todd (11/28/10), distracted driving crash
Liam Mikael Kowal (9/4/16), impaired driving crash	Benjamin Seitz (7/7/14), hot car incident
Orbie Wilburn (9/2/02), truck crash	

OVER THE PAST 20 YEARS,

MORE THAN THREE-QUARTERS OF A MILLION

PEOPLE WERE KILLED AND 51.5 MILLION MORE

WERE INJURED IN MOTOR VEHICLE CRASHES

IN THE UNITED STATES.

